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## The Issue Of Obesity In United Arab Emirates

Nowadays health problems are becoming more common than ever globally. This possibly has to do with the development of technology and medical sciences. The prevalence of childhood obesity in the United Arab Emirates is dramatically increasing, even more than the high levels of obesity in the USA and Europe (Bin Zaal et al. 2011). This essay aims to discuss school-age children's obesity in the UAE and how a high fiber diet contributes to it. Through this essay, three-course outcomes will be achieved: discuss the relationship between food, nutrition, and health, identify nutrients in food that are essential to health and well-being, and discuss the problem of obesity, undernutrition, and eating disorders. This essay will include methodology, why obesity is an important topic to talk about?, the definition of overweight and obesity, BMI for children, causes of obesity, high fiber diet, and finally some recommendations.

Obesity is a critical issue in the United Arab Emirates. Especially for school-age children in the UAE. According to (The World Health Survey in the United Arab Emirates, 2019) 27.8% of the Emiratis were obese. Additionally, (Junaibi et al. (2012)) stated that overweight and obesity are widespread among children in the UAE. Since UAE, has undergone a significant change in recent years affecting cultural and economical aspects, which caused the creation of a multinational society, with 80.7% expatriates and 19.3% emirates, resulting in noticeable changes in citizens' lifestyle and nutrition (Garemo et al. (2018)). Clarifying that childhood obesity is not only a growing problem in the UAE but also in any developed country (Alblooshi et al. (2016)). On the other hand, (Razzak et al. (2017)) explains that obesity is no longer limited to developed countries, obesity can be found in any country that adopts the western lifestyle ( eating more energy-dense food having enhanced sugars and animal fats, while eating fewer fibers, restricted to a limited physical activity). Furthermore, numerous medical problems that an obese child has a high risk of getting them according to (Alblooshi et al. (2016)) and (Razzak et al. (2017)) are such as cardiovascular disease, hypertension, stroke, diabetes, metabolic syndrome, sleep apnea, asthma, gastrointestinal problems, and certain cancers. However, obesity also has effects on the psychological and social aspects of the child. Psychological issues like depression, low self-esteem. Social issues like a child being bullied.

Overweight or obesity is defined in several definitions. In this report, the main ones will be covered. Physiologically, overweight or obesity is defined as an excessive accumulation of fat in the adipose tissues (Razzak et al. 2017). Childhood obesity occurs when a child within his/her age and height is above normal weight (Defining Childhood Obesity, 2018). Specifically, overweight for children and teens of the same age and gender is defined as a BMI equal to or greater than 85th percentile, but less than 95th percentile. While, obesity for children and teens of the same age and gender is defined as a BMI equal to or greater than the 95th percentile (Defining Childhood Obesity, 2018). To make notice that BMI stands for (Body mass index). It is a measure of weight (kg) divided by the square of height (m<sup>2</sup>) (Bin Zaal et al. 2011). BMI is age and gender-specific and is one of the most practical ways of calculating overweight and obesity. An important point to know that BMI does not measure body fat directly.

One of the most commonly used indicators is CDC growth charts which are used to measure the size and growth of children and teens shown in the following table (Defining Childhood Obesity, 2018)

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Several factors contribute to obesity in school-age children. First of all, genetics play a big role in making a child obese (Defining Childhood Obesity, 2018). Genetics affects how the body efficiently converts food to energy and how the body controls the appetite and amount of calories burnt during exercise. Second of all, the child's behavior, including his/her parents and school community behaviors (Defining Childhood Obesity, 2018). Behaviors such as watching television or using a device for a long time with less activity. In addition to excessive sleeping routines or low sleeping routines. Along with eating high-calorie food that has low nutrients and drinking beverages like soda, etc. Last but not least, obesity can be caused by some medications and medical issues such as Prader-Willi syndrome (is a genetic disorder caused by loss of function of specific genes), Cushing syndrome (is a disorder that appears when the body makes too much cortisol hormone over a long time). Medications such as steroids and beta-blockers, anti-seizure medications, antidepressants, antipsychotic medications, etc. (Obesity, 2020).

The traditional diet of the Arabian Gulf was characterized as high fiber with a low-fat diet (Bin Zaal et al. 2011). However, as discussed previously it has changed more to a westernized diet which is characterized as low fiber with a high-fat diet, including sodium, cholesterol, and sugars (Bin Zaal et al. 2011). According to (Zhang et al. 2017), a diet that is considered a high fiber diet is recommended to reduce obesity and type 2 diabetes risks in humans. Fibers are types of carbohydrates that come under polysaccharides. The body cannot digest fibers. Usually, carbohydrates are broken down into sugar molecules. However, fiber cannot be broken into sugar molecules but instead, it moves through the body undigested (Fiber, 2019). Fibers help to control the body's use of sugars. Also, it controls hunger (Fiber, 2019). According to (Fiber, 2019), children need a minimum of 20 to 30 grams of fiber every day for good health. Dietary Guidelines for Americans (2015-2020) listed sources of fibers including banana, avocado, apple with skin, green peas, almonds, pumpkin, whole wheat paratha bread, and dates, etc. Fibers can be classified into two beneficial classifications: soluble fiber and insoluble fiber. Soluble fiber dissolves in water (Fiber, 2019). It helps lower cholesterol and glucose levels. Examples of soluble fibers include lentils, apples, nuts, etc. On the other hand, insoluble fiber does not dissolve in water (Fiber, 2019). It helps food move along the digestive system. Moreover, it helps promote laxation and prevent constipation. Examples of insoluble fibers include whole wheat, brown rice, carrots, and legumes, etc.

In conclusion, health is not only an individual concern but also a worldwide social goal. Poor health leads to a depleted workforce which leads to economic decline leading to low personal income which leads to a lack of access to school, health care, food and drink, and so on. If a child is obese, he/she has a greater risk to become an obese adult. "Obesity" means having much more fat in the body than "overweight". The common way of calculating overweight and obesity is by using BMI. Childhood obesity is a serious problem in the UAE. An obese child faces physiological, psychological, and social concerns. Preventing children from obesity involves their parents and school. By controlling children's food choices, habits, and physical activities. To have healthy habits through the life of the child and carry it with him/her while being an adult. As well as the commitment to a balanced healthy diet and being physically active can help obese children to lose and maintain a healthy weight through childhood (Defining Childhood Obesity, 2018). According to the Dietary Guidelines for Americans (2015-2020), a healthy diet is composed of eating a range of fruits and vegetables, lean protein foods, whole grains, dairy products with low fat or fat-free. Limiting beverages and foods that include enhanced sugars, trans fats, and sodium. A recommended diet for decreasing the risk of obesity is the high fiber diet (Zhang et al. 2017). Fibers' best sources are fruits, vegetables,

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whole grains, nuts, and legumes. In addition, according to the Physical Activity Guidelines for Americans, children between six years and older must be physically active for at least one hour a day.